

系所組別： 生物多樣性研究所

考試科目： 保育生物學

考試日期：0308，節次：2

※ 考生請注意：本試題 可 不可 使用計算機（請勿在本試題紙上作答，否則不予計分）

Conservation Biology 2009

1. Discuss three positive and three negative effects of setting corridors for conservation

(15%)

2. From the points of view of conservation biology, discuss whether the introduction of giant pandas to Taipei Zoo is a good practice of conservation? What positive and negative effects may it cause respectively? (8%)

3. Define α richness, β richness, and γ richness (or so called α , β , and γ diversity) (12%)

4. 單選解釋題：請在答案卷上標示題號、Ans:及Desc:，並將正確答案填入Ans:，答案簡要解釋於Desc:。每小題5分

(1) Which term describes a species that is found in only one geographic area?

Ans: _____

Desc:

Extinct

Endemic

Endangered

Conservative

Threatened

(2) Around 40 percent of medications have active ingredients that are sourced from either plants or animals. What benefit does this describe?

Ans: _____

Desc:

Ethical value

Aesthetic value

Direct economic value

Indirect economic value

Prevention value

(背面仍有題目,請繼續作答)

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(3) Which term describes an alteration of the environment so extensive that certain organisms can no longer survive there?

Ans: _____

Desc:

Habitat loss

Defragmentation

Overexploitation

Ecosystem disruption

Introduced species

(4) Which of the following would be most likely to result in habitat fragmentation?

Ans: _____

Desc:

A freeway cutting through a forest

A farmer using insecticides to control pests

A factory releasing chemicals into a lake

A complete forest being burned and converted to grazing land

A whaling company hunting large numbers of blue whales

(5) Individuals on the borders of ecosystems are less likely to survive as conditions are altered at the borders. This situation is known as what?

Ans: _____

Desc:

Fragment effects

Physical effects

Predation effects

Change effects

Edge effects

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(6) A species that promotes diversity in an ecosystem is known as what?

Ans: _____

Desc:

- A keystone species
- A dependent species
- A linking species
- A growth species
- A limiting species

(7) Which term describes actions aimed at preserving species and preventing extinction?

Ans: _____

Desc:

- Rehabilitation
- Regeneration
- Conservation
- Restoration
- Minimization

5. Please define the following terms (6% each)

- A. Inbreeding depression
- B. Fitness
- C. Genetic drift
- D. Parapatric speciation
- E. Biological species concept